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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,025	09/23/2005	Seiji Tanimoto	277030US0PCT	7360

22850 7590 05/19/2009  
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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BERNSHTEYN, MICHAEL

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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05/19/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/550,025	<b>Applicant(s)</b> TANIMOTO ET AL.	
	<b>Examiner</b> MICHAEL M. BERNSHTEYN	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 1-5 and 13-20.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 13-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action follows a response filed on April 28, 2009. No claims have been amended, cancelled or added.
2. After further consideration allowance of claims 1-5 and 13-20 has been withdrawn.
3. Claims 1-5 and 13-20 are pending.

#### ***Claim Rejections - 35 USC § 102***

4. The text of this section of Title 35 U.S.C. not included in this action can be found in a prior Office Action.

#### ***Claim Rejections - 35 USC § 103***

5. The text of this section of Title 35 U.S.C. not included in this action can be found in a prior Office Action.
6. Claims 1-5 and 13-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kim et al. ("Poly(vinyl alcohol) Stabilization of Acrylic Emulsion Polymers Using the Miniemulsion Approach", *Macromolecules*, **2003**; 36 (15), p. 5573-5579).

With regard to the limitations of claims 1-5 and 13-20, Kim discloses a (meth)acrylic resin emulsion and a method for producing of (meth)acrylic resin emulsion. The emulsion consists of n-butyl acrylate and methyl methacrylate (50/50 wt%) employing poly(vinyl alcohol) (PVA) as a stabilizer and hexadecane (HD) as a costabilizer (abstract).

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The obtained poly(vinyl alcohol) (PVA) has a degree of hydrolysis (DH) (or a degree of saponification) 87-89%, and a degree of polymerization (DP = 500), which are clearly within the claimed ranges (p. 5574, the right column, Experimental Section).

With regard to that said emulsion has a "factor a" of at least 0.3 that indicates the particle size distribution width of the emulsion and of which a film formed at 20°C and 65 % RH to have a thickness of 500 µm has a tensile strength of at least 100 kg/cm<sup>2</sup> and that a dissolution of said film is at most 10% when dipped in an aqueous 1 N sodium hydroxide solution at 20°C for 24 hours instantly claimed in claim 1, Kim is silent about it. However, in view of substantially identical composition for (meth)acrylic resin emulsion (the same ingredients of n-butyl acrylate and methyl methacrylate, their weight ratio; the degree of hydrolysis (saponification) and the degree of polymerization of PVA) between Kim and instant claims, it is the examiner position that Kim's composition for (meth)acrylic resin emulsion inherently possesses these properties. Since the USPTO does not have equipment to do the analytical test, the burden is now shifted to the applicant to prove otherwise. **In re Fitzgerald** 619 F 2d 67, 70, 205 USPQ 594, 596 (CCPA 1980).

Even assuming that the claims are not anticipated by the reference, it would have been obvious to one of ordinary skill in the art to make the polymer (the (meth)acrylic resin emulsion) having the claimed properties using the claimed process because it appears that the reference generically embrace the claimed subject matter and the person of ordinary skill in the art would have

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expected all embodiments of the reference to work. Applicants have not demonstrated that the differences, if any, between the claimed subject matter and the subject matter of the prior art examples give rise to unexpected products.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL M. BERNSHTEYN whose telephone number is (571)272-2411. The examiner can normally be reached on M-Th 8-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Michael M. Bernshteyn/  
Examiner, Art Unit 1796

/M. M. B./  
Examiner, Art Unit 1796

/David Wu/  
Supervisory Patent Examiner, Art Unit 1796